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Docket No. 740756-2628

Serial No. 10/617,770

Page 6

REMARKS

The Examiner's Final Office Action of July 3, 2006 has been received and its contents reviewed. Applicant would like to thank the Examiner for the consideration given to the above-identified application.

Claims 1-12 were pending prior to the instant amendment. By this amendment, claims 1, 5 and 6 have been amended, and new claims 13-16 have been added. Accordingly, claims 1-16 are pending, of which claims 1-6 are independent.

In the detailed Office Action, claims 5-6 and 11-12 stand rejected under 35 U.S.C. §112, 2nd paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Particularly, the Examiner asserted that it is unclear how time is shortened with a thickness of the thin film. In response, Applicants has amended claims 5-6, as shown above, to improve the claim language by reciting the feature wherein a thickness of the thin film is 0.1 μm or less.

Claims 1-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hamada et al. (U.S. Patent No. 6,114,183 – hereafter Hamada) in view of Shoji et al. (JP-1018638 – hereafter Shoji).

In the obviousness rejection, the Examiner is contending that Hamada disclose method of manufacturing an EL device, comprising forming an electrode which is electrically connected with the TFT, etc. The Examiner further asserts that Hamada does not disclose that the electrode is formed using an electron beam evaporation method. Hence, the Examiner relies on Shoji to cure the deficiency of Hamada, since Shoji allegedly discloses a method of producing an EL device wherein the second electrode is formed over the organic EL layer using an electron beam vapor deposition method.

In response to the rejection, Applicant has amended claims 1 and 3, as shown above, so as to add features wherein an acceleration voltage of electrons of the electron beam evaporation method is controlled such that the thin film transistor is not deteriorated with radial rays radiated from an evaporation material for forming the thin film when the evaporation material is irradiated with an electron beam, and wherein an increase of a sub-threshold coefficient of the thin film transistor is prevented by controlling the acceleration voltage of electrons, as shown above, to further distinguish the presently claimed invention

10143934.2

Docket No. 740756-2628
Serial No. 10/617,770
Page 7

over Hamada and Shoji.

As disclosed on page 2, lines 19-21 of the specification, the inventors have found that abnormality in a threshold voltage and in sub-threshold characteristics is recognized in electroluminescence display device with the structure of Fig. 2 in the specification. As a result of the diagnosis of the abnormality, it has been found that a significant shift of a threshold voltage (V_{th}) or a sub-threshold coefficient (S value) is seen between the values before and after the formation of a metal film, which serves as a cathode, with an electron beam evaporation method. Accordingly, as recited in claims 1-6, a shift of a threshold voltage and increase of a sub-threshold coefficient of the thin film transistor are prevented by controlling the acceleration voltage of electrons or controlling a time during the thin film transistor is exposed to radial rays.

In contrast with Applicant's claimed invention, Shoji discloses "the loss or reduction of the fluorescence of the organic light-emitting material contained in the organic substance layer... can be suppressed at the time of forming the cathode... by the electron beam vapor deposition method in which the acceleration voltage is controlled.." (page 23, lines 2-9). By Shoji's disclosure, it appears that the problem of a thin film transistor as mentioned above is not recognized in Shoji as well as in Hamada. Hence, without recognizing the problem, there can be no suggest or motivation for improving the characteristic abnormality of the thin film transistor in Shoji and Hamada. Therefore, Applicant respectfully asserts that Shoji fails to disclose the features of the present invention, and that it is not proper to combine the electron beam evaporation method of Shoji and a thin film transistor of Hamada without proper motivation or suggestion.

The requirements for establishing a *prima facie* case of obviousness, as detailed in MPEP § 2143 - 2143.03 (pages 2100-122 - 2100-136), are: first, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference to combine the teachings; second, there must be a reasonable expectation of success; and, finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations.


New dependent claims 13-16 have been added to further complete the scope to which Applicant is entitled.

10143934.2

Docket No. 740756-2628
Serial No. 10/617,770
Page 8

In view of the foregoing, it is respectfully requested that the rejections of record be reconsidered and withdrawn by the Examiner, that claims 1-16 be allowed and that the application be passed to issue. If a conference would expedite prosecution of the instant application, the Examiner is hereby invited to telephone the undersigned to arrange such a conference.

Respectfully submitted,



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10143934.2